

**CIVIL ENGINEERING ASSOCIATE - BWP**

**DEFINITION**

Under general supervision, to perform professional engineering work in the research, design, construction, and maintenance of waterworks facilities; supervise the work of professional and para-professional staff; and perform related work as required.

**ESSENTIAL FUNCTIONS**

Performs and/or assists in research, drafting, computing, checking, and site evaluation needed in the preparation of plans, designs, environmental documentation, feasibility studies, cost estimates, and specifications for the construction, modification, maintenance, and operation of potable and recycled water production, storage, and distribution systems; performs detailed drafting using AutoCAD and hydraulic calculations for water engineering projects; researches and identifies project design requirements; conducts computer modeling of distribution systems to determine design requirements and parameters; analyzes and determines fire flow availability for existing and proposed projects; writes specifications, prepares plans and work orders, and calculates cost estimates for water engineering projects; assists in developing project schedules; performs plan reviews and plan checks on a variety of permits to ensure compliance with BWP standards; meets with customers, developers, architects, engineers, and contractors regarding project requirements, including fee schedules for new water services as set forth in the Department's rules, regulations, policies, and procedures; monitors work in progress, including field inspections to ensure compliance with approved plans, specifications, and standards; complies and maintains records of completed projects; prepares a variety of special engineering studies, planning documents, correspondences, and reports; supervises professional and para-professional engineering personnel engaged in the investigation, preparation, and review of design plans, estimates, and reports for water construction and improvement projects; drives on City business.

**MINIMUM QUALIFICATIONS**

**Employment Standards:**

- Knowledge of – modern principles and practices of civil and hydraulic engineering; the methods and materials used in the construction of water distribution systems; applicable codes, regulations, and American Water Work Association (AWWA) standards; principles and practices of sound personnel supervision.
- Skill in - drafting, mapping, and estimating; preparing specifications and writing technical reports; various computer-based software programs, including but not limited to AutoCAD, Microsoft Office, and ArcGIS.
- Ability to - apply civil engineering principles and techniques to evaluate and solve civil engineering problems of varying difficulties; make or check complex engineering computations quickly and accurately; exercise sound and independent judgment in performing assigned projects; organize and prioritize workload; communicate effectively, both orally and in writing; coordinate and review the work of technical subordinates; establish a teamwork environment; maintain effective working relationships with supervisors, fellow employees, and the public.

**Education/Training:** A Bachelor of Science degree from an accredited college or university with major course work in civil engineering or related field and two years of experience as a water utility civil engineering assistant.

**License & Certificates:** A valid California Class "C" driver's license or equivalent at time of appointment.

**SUPPLEMENTAL INFORMATION**

**Desirable Qualifications:** Registration as a Civil Engineer in California.